



SCRIPTING CUSTOM FORMS



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(the PEPFAR installation of DHIS2)



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1.

DEFAULT FORMS

HIV Status (Inc Unknown) and

Filter in section

Positive

Male

VMMC_CIRC (N, DSD, HIVStatus/Sex): Voluntary Circumcised

VMMC_CIRC (N, TA, HIVStatus/Sex): Voluntary Circumcised

Filter in section

MSM S

KP_PREV (N, DSD, KeyPop) v2: Key Pop Preventive

KP_PREV (N, TA, KeyPop) v2: Key Pop Preventive

DHIS2 STANDARD FORM

GEND_GBV

HTS_TST

KP_PREV

VMMC_CIRC

Filter in section

<10

Female

Male

GEND_GBV (N, DSD, Age/Sex/PEP): GBV Care

GEND_GBV (N, TA, Age/Sex/PEP): GBV Care

Filter in section

Value

GEND_GBV (N, DSD): GBV Care

GEND_GBV (N, TA): GBV Care

Filter in section

Sexual Viole
(Post-Rape C

GEND_GBV (N, DSD, Age/Sex/ViolenceType) v2: GBV Care

GEND_GBV (N, TA, Age/Sex/ViolenceType) v2: GBV Care

DHIS2

SECTION

FORM

DHIS2 FORMS

- ▶ Default aggregate form
 - ▷ Alphabetic
 - ▷ Category combos all separate
- ▶ Section form (also aggregate)
 - ▷ Category combos *still* separate
- ▶ Custom aggregate form
 - ▷ Exactly how you want it
 - ▷ ...but very difficult to maintain

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2.

CUSTOM FORMS

Prevention

90 = Knowing HIV Status

Health Systems

DSDTA-SDI

- Collapse All

DSD: KP_PREV (Numerator)

Auto-Calculate

Number of key populations reached with indi
population. Numerator will auto-calculate fro

Numerator

15

Required

Disaggregated by Key Population Type

PWID

Female

Male

1

2

3

Sex workers

Female

MSM

TG

3

4

7

Non Sex Workers

MSM

TG

5

People in prisons and other enclosed
settings

Required

Disaggregated by Status / K

PWID

MS

Known Positive

Newly tested and / or referred for
testing

Declined testing and / or referral

CUSTOM
RESULT

CUSTOM FEATURES

- ▶ Vertical and horizontal tabbed navigation
- ▶ Autocalculation
- ▶ Mutual exclusion
- ▶ Validation rules
- ▶ Drafts in static HTML

COMPLICATED PROCESS

- ▶ Numerous changes
- ▶ Frequent changes
- ▶ Many entry fields
- ▶ Lots of interactivity
- ▶ Precise requirements
- ▶ Urgent changes

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3.

THE APPROACH

TIM IN A HOTEL ROOM

- ▶ Our original approach was for Tim to do this all by hand

CONTROL FILE

PROCESSED BY SCRIPT

- ▶ Spreadsheet control file (CSV)
- ▶ HTML templates
- ▶ Python script processes them to create assets to upload to DHIS2
- ▶ All together they are called MERTide
(MER = Monitoring, Evaluation, and Reporting)

Type	form_name	vtab_name	ind_name	ind_freq	ctl_uniqueid	ctl_ex	ctl_r
FORM	MERTIDE Custom Form						
VTAB		Prevention					
IND			VMMC_CIRC	Quarterly			
SUB					vmmc_circ_numerator		
SUB					vmmc_circ_5year		
SUB							
SUB							
IND			KP_PREV (N	Semiannually			
SUB							
SUB					kp_prev_numerator		
SUB							
IND			GEND_GBV	Annually			
SUB					gend_gbv_numerator		
SUB							
SUB							
SUB					gend_gbv_violence_service_type		
SUB					gend_gbv_pep		
VTAB		90 = Knowing HIV Status					
IND			HTS_TST (Fac	Quarterly			
SUB					hts_tst_facility_numerator		
SUB							
FORM	MERTIDE Section Form						
VTAB		Prevention					
IND			VMMC_CIRC	Quarterly			
SUB					vmmc_circ_numerator		
SUB					vmmc_circ_5year		
SUB							
SUB							
IND			KP_PREV (N	Semiannually			
SUB							
SUB					kp_prev_numerator		
SUB							
IND			GEND_GBV	Annually			
SUB					gend_gbv_numerat		
SUB							

CONTROL
FILE

CONTROL FILE FEATURES

- ▶ FORM, VTAB, IND, SUB
- ▶ HTML template
- ▶ Rules
 - ▷ Mutual exclusive
 - ▷ Autocalculation
 - ▷ DHIS2 Rules
 - ▷ Frequency Locks

FILES GENERATED

- ▶ A file to import the forms into DHIS2
- ▶ Three files to import validation rules into DHIS2
- ▶ Static HTML versions of the forms
- ▶ Several files that probably only make sense for DATIM
- ▶ A log file

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4.

PROPAGATION

ATTEMPTS THUS FAR

- ▶ Code is now open-source
- ▶ Presentation at 2018 DHIS2 Symposium
- ▶ Presentation at 2018 DHIS2 Annual Conference
- ▶ Presentation at 2020 DHIS2 Annual Conference
- ▶ So far, there isn't a second use case

SURVEY OF ATTENDEES

- ▶ Tell us about yourselves and your forms

YOUR FORMS

- ▶ Would anyone volunteer to describe their organization's form needs?

NEXT STEPS

- ▶ If your organization has a software developer that would like to work on scripting forms for you, let us know.
- ▶ Contact: ben@dhis2.org, jim@dhis2.org, tharding@baosystems.com

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5.

CODA

COLLABORATORS

- ▶ Kyle Pittleman
- ▶ Greg Wilson

THANKS!

Any questions?

Contact: ben@dhis2.org, jim@dhis2.org, tharding@baosystems.com

Supporting files on Github: bit.ly/hispus_scf

Open source repo: github.com/pepfar-datim/mertide-public